

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Final Office Action dated December 13, 2007 (Paper No. 20071207) has been received and its contents reviewed. Reconsideration of the pending application is respectfully requested in view of the following amendments and observations.

By this Amendment, claims 18, 20, 30 and 31 have been amended. Claim 26 has been cancelled without prejudice or disclaimer. Support for the amendments to claims 18, 20, 30 and 31 can be found at least at claim 26 as originally filed, Figure 1, and at page 4 lines 5-13 of the original Specification as filed PCT/BE2003/000130 (WO 2004/022977 A1). No New matter is added.

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (Office Action at page 8).

Applicant thanks the Examiner for the indication of allowable subject matter regarding claim 26. Claims 18, 30 and 31 have been amended to include subject matter similar to that of claim 26. Claim 26 has been cancelled without prejudice or disclaimer.

Claims 18-23, 29-33, 35 and 37 are rejected under 35 U.S.C. §102(e) as anticipated by United States Patent Application Publication No. 2003 / 0182952 A1 (to Brooke)(hereinafter "*Brooke*").

The rejection of claims 18-23, 29, 35 and 37 is respectfully traversed and reconsideration is requested. Claims 18-23, 29, 35 and 37 recite a combination of elements including, "the hysteresis module is configured such that an increase of the rotational speed resulting from the hysteresis upper temperature limit being detected in the lower speed range of the

compressor resulting in an increase of the operational pressure, results in an automatic idle condition of the compressor element.” *Brooke* does not teach or suggest at least this feature of the claimed invention.

The workings of the hysteresis module of the present invention may be explained according to the following decision tree.

TO: gas outlet temperature;
S: rotational speed of the compressor element;
HMIN: hysteresis minimum temperature limit;
HMAX: hysteresis maximum temperature limit;
SMAX: maximum rotational speed;
SMIN: minimum rotational speed.

The working of the hysteresis module can thus be explained by the following scheme:

If $TO = HMAX$ and S is in the high speed range close to $SMAX$;
then S will be lowered ($S - DS$).
If $TO = HMAX$ and S is in the low speed range close to $SMIN$;
then S will be increased ($S + DS$).
If $TO = HMIN$ and S is in the high speed range close to $SMAX$;
then S will be increased ($S + DS$).
If $TO = HMIN$ and S is in the low speed range close to $SMIN$;
Then S will be lowered ($S - DS$).

Brooke generally teaches methods and an apparatus for controlling compressor speed. *Brooke* generally teaches that a compressor may be stopped when a target set-point temperature is reached (Page 4, [0037]). *Brooke* also teaches conditions under which the compressor may resume operations in a high speed mode (Id.). However, *Brooke* does not disclose

Applicant's claimed elements and parameters that result in an automatic idle condition of the claimed compressor.

Accordingly, claim 18 and claims 19-23, 29, 35 and 37 dependent therefrom are believed to be allowable over *Brooke*.

The rejection of claim 30 is respectfully traversed and reconsideration is requested. Claim 30 recites a combination of elements including, "the increase of the rotational speed resulting from the hysteresis upper temperature limit being detected in the lower speed range of the compressor resulting in an increase of the operational pressure, results in an automatic idle condition of the compressor element."

Applicant advances the same arguments as those regarding claims 18-23, 29, 35 and 37.

Accordingly, claim 30 is believed to be allowable over *Brooke*.

The rejection of claims 31-33 is respectfully traversed and reconsideration is requested. Claims 31-33 recite a combination of elements including, "the hysteresis module is configured such that an increase of the rotational speed resulting from the hysteresis upper temperature limit being detected in the lower speed range of the compressor element resulting in an increase of the operational pressure, results in an automatic idle condition of the compressor element."

Applicant advances the same arguments as those regarding claims 18-23, 29-30, 35 and 37.

Accordingly, claims 31-33 are believed to be allowable over *Brooke*.

Claims 24-25 and 27 are rejected under 35 U.S.C. §103(a) as unpatentable over *Brooke* in view of United States Patent 4,897,798 (to *Cler*)(hereinafter "*Cler*").

Claims 24-25 and 27 depend upon independent claim 18 and thus necessarily contain all of the limitations of claim 18. Accordingly, claims 24-25 and 17 are believed to be allowable over the cited references.

In addition, *Cler* is drawn to an adaptive environment control system such as that used in a building to control the temperature of a building. *Cler* generally states, "[t]hese thermal characteristic enable the adaptive environment control system to determine both the length of time it takes the building to heat up and cool down when the HVAC system idles." (Abstract). However, *Cler* does not teach or suggest Applicant's claimed elements and parameters that result in an automatic idle condition of the claimed compressor.

Claims 28 and 36 are rejected under 35 U.S.C. §103(a) as unpatentable over *Brooke*.

Claims 28 and 36 depend either directly or indirectly upon independent claim 18 and thus necessarily contain all of the limitations of claim 18. Accordingly, claims 28 and 36 are believed to be allowable over *Brooke*.

Claim 34 is rejected under 35 U.S.C. §103(a) as unpatentable over *Brooke* in view of *Cler*.

Claim 34 depends indirectly from claim 18 and thus necessarily contains all of the limitations of claim 18. Accordingly, claim 34 is believed to be allowable over *Brooke* and *Cler*.

Claim 38 is rejected under 35 U.S.C. §103(a) as unpatentable over *Brooke*.

Claim 38 depends indirectly from claim 18 and thus necessarily contains all of the limitations of claim 18. Accordingly, claim 38 is believed to be allowable over *Brooke*.

Conclusion

As a result of the amendments to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicant's attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin J. CasSELL", written over a horizontal line.

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